## § 393.75

one motor vehicle intended to be coupled with another vehicle as defined in paragraph (g)(2)(ii) of this section shall be attached with U-bolts meeting the requirements of paragraph (j)(2) of this section.

(2) Rear axle attachment. The rear axle of one vehicle shall be coupled to the frame of the other vehicle by means of a connecting device which when in place forms a rectangle. The device shall be composed of two pieces, top and bottom. The device shall be made of 4-inch by 1/2-inch steel bar bent to shape and shall have the corners reinforced with a plate at least 3 inches by ½ inch by 8 inches long. The device shall be bolted together with 3/4-inch bolts and at least three shall be used on each side. Wood may be used as spacers to keep the frames apart and it shall be at least 4 inches square.

(Sec. 12, 80 Stat. 931; 49 U.S.C. 1651 note; section 6 of the Department of Transportation Act, 49 U.S.C. 1655, and the delegations of authority at 49 CFR 1.48 and 389.4)

[33 FR 19735, Dec. 25, 1968, as amended at 35 FR 10907, July 7, 1970; 37 FR 21440, Oct. 11, 1972; 53 FR 49400, Dec. 7, 1988; 70 FR 48054, Aug. 15, 2005]

## Subpart G—Miscellaneous Parts and Accessories

## §393.75 Tires.

- (a) No motor vehicle shall be operated on any tire that (1) has body ply or belt material exposed through the tread or sidewall, (2) has any tread or sidewall separation, (3) is flat or has an audible leak, or (4) has a cut to the extent that the ply or belt material is exposed.
- (b) Any tire on the front wheels of a bus, truck, or truck tractor shall have a tread groove pattern depth of at least \(^{4}32\) of an inch when measured at any point on a major tread groove. The measurements shall not be made where tie bars, humps, or fillets are located.
- (c) Except as provided in paragraph (b) of this section, tires shall have a tread groove pattern depth of at least \%\_{32} of an inch when measured in a major tread groove. The measurement shall not be made where tie bars, humps or fillets are located.

- (d) No bus shall be operated with regrooved, recapped or retreaded tires on the front wheels.
- (e) A regrooved tire with a load-carrying capacity equal to or greater than 2,232 kg (4,920 pounds) shall not be used on the front wheels of any truck or truck tractor.
- (f) Tire loading restrictions (except on manufactured homes). No motor vehicle (except manufactured homes, which are governed by paragraph (g) of this section) shall be operated with tires that carry a weight greater than that marked on the sidewall of the tire or, in the absence of such a marking, a weight greater than that specified for the tires in any of the publications of any of the organizations listed in Federal Motor Vehicle Safety Standard No. 119 (49 CFR 571.119, S5.1(b)) unless:
- (1) The vehicle is being operated under the terms of a special permit issued by the State; and
- (2) The vehicle is being operated at a reduced speed to compensate for the tire loading in excess of the manufacturer's rated capacity for the tire. In no case shall the speed exceed 80 km/hr (50 mph).
- (g)(1) Tire loading restrictions for manufactured homes built before January 1, 2002. Manufactured homes that are labeled pursuant to 24 CFR 3282.362(c)(2)(i) before January 1, 2002, must not be transported on tires that are loaded more than 18 percent over the load rating marked on the sidewall of the tire or, in the absence of such a marking, more than 18 percent over the load rating specified in any of the publications of any of the organizations listed in FMVSS No. 119 (49 CFR 571.119, S5.1(b)). Manufactured homes labeled before January 1, 2002, transported on tires overloaded by 9 percent or more must not be operated at speeds exceeding 80 km/hr (50 mph).
- (2) Tire loading restrictions for manufactured homes built on or after January 1, 2002. Manufactured homes that are labeled pursuant to 24 CFR 3282.362(c)(2)(i) on or after January 1, 2002, must not be transported on tires loaded beyond the load rating marked on the sidewall of the tire or, in the absence of such a marking, the load rating specified in any of the publications

of any of the organizations listed in FMVSS No. 119 (49 CFR 571.119, S5.1(b)).

- (h) *Tire inflation pressure.* (1) No motor vehicle shall be operated on a tire which has a cold inflation pressure less than that specified for the load being carried.
- (2) If the inflation pressure of the tire has been increased by heat because of the recent operation of the vehicle, the cold inflation pressure shall be estimated by subtracting the inflation buildup factor shown in Table 1 from the measured inflation pressure.

TABLE 1—INFLATION PRESSURE MEASUREMENT CORRECTION FOR HEAT

Average speed of vehicle in the previous hour	Minimum inflation pressure buildup		
	Tires with 1,814 kg (4,000 lbs.) max- imum load rating or less	Tires with over 1,814 kg (4,000 lbs.) load rating	
66–88.5 km/hr (41–55 mph).	34.5 kPa (5 psi)	103.4 kPa (15 psi).	

[34 FR 9344, June 13, 1969, as amended at 40 FR 44557, Sept. 29, 1975; 41 FR 36657, Aug. 31, 1976; 44 FR 25455, May 1, 1979; 44 FR 47938, Aug. 16, 1979; 53 FR 18057, May 19, 1988; 53 FR 49401, Dec. 7, 1988; 63 FR 8339, Feb. 18, 1998; 65 FR 70220, Nov. 21, 2000; 66 FR 67694, Dec. 31, 2001; 70 FR 48054, Aug. 15, 2005]

## § 393.76 Sleeper berths.

(a) Dimensions—(1) Size. A sleeper berth must be at least the following size:

Date of installation on motor vehicle	Length measured on center- line of lon- gitudinal axis (inches)	Width measured on center- line of transverse axis (inches)	Height measured from high- est point of top of mat- tress (inches) <sup>1</sup>
Before January 1, 1953 After December 31,	72	18	18
1952, and before October 1, 1975 After September 30,	75	21	21
1975	75	24	24

¹ In the case of a sleeper berth which utilizes an adjustable mechanical suspension system, the required clearance can be measured when the suspension system is adjusted to the height to which it would settle when occupied by a driver.

(2) Shape. A sleeper berth installed on a motor vehicle on or after January 1, 1953 must be of generally rectangular shape, except that the horizontal corners and the roof corners may be rounded to radii not exceeding 10½ inches.

- (3) Access. A sleeper berth must be constructed so that an occupant's ready entrance to, and exit from, the sleeper berth is not unduly hindered.
- (b) *Location*. (1) A sleeper berth must not be installed in or on a semitrailer or a full trailer other than a house trailer.
- (2) A sleeper berth located within the cargo space of a motor vehicle must be securely compartmentalized from the remainder of the cargo space. A sleeper berth installed on or after January 1, 1953 must be located in the cab or immediately adjacent to the cab and must be securely fixed with relation to the cab.
- (c) Exit from the berth. (1) Except as provided in paragraph (c)(2) of this section, there must be a direct and ready means of exit from a sleeper berth into the driver's seat or compartment. If the sleeper berth was installed on or after January 1, 1963, the exit must be a doorway or opening at least 18 inches high and 36 inches wide. If the sleeper berth was installed before January 1, 1963, the exit must have sufficient area to contain an ellipse having a major axis of 24 inches and a minor axis of 16 inches.
- (2) A sleeper berth installed before January 1, 1953 must either:
- (i) Conform to the requirements of paragraph (c)(1) of this section; or
- (ii) Have at least two exits, each of which is at least 18 inches high and 21 inches wide, located at opposite ends of the vehicle and useable by the occupant without the assistance of any other person.
- (d) Communication with the driver. A sleeper berth which is not located within the driver's compartment and has no direct entrance into the driver's compartment must be equipped with a means of communication between the occupant and the driver. The means of communication may consist of a telephone, speaker tube, buzzer, pull cord, or other mechanical or electrical device.
- (e) *Equipment*. A sleeper berth must be properly equipped for sleeping. Its equipment must include:
- (1) Adequate bedclothing and blankets; and
  - (2) Either:
- (i) Springs and a mattress; or